

# EFFECT OF PROBLEM-BASED LEARNING ON STUDENTS' PROBLEM SOLVING SKILL AND CONCEPT COMPREHENSION IN LEARNING ECOSYSTEM FOR SECONDARY

Frilia Rizky Amalia  
Indonesia University of Education  
International Program on Science Education

## ABSTRACT

Aims of this study to examine effect of problem-based learning toward students' problem solving skill and concept comprehension in learning ecosystem in one of private school in West Bandung. Data is gained by concept comprehension test, problem solving test, observation sheet and questioner. The observation sheet is adapted from Gok. The observation sheet consist of indicators of problem solving skill; *identifying the fundamental principle(s), solving and checking*. The result of data analysis shows that there are improvements in concept comprehension in experimental class with normalized gain 0.5 which categorized into medium improvement. In other hand in control class is obtained -1.1. For problem solving skill in experimental class is obtained 0.31 which is categorized into medium improvement, while in control class is obtained 0.14 which is categorized into low improvement. From observation sheet can be described that problem solving skill profile in experimental class is higher than control class. Mostly students gave positive attitude in learning through problem-based learning.

**Keywords** : problem-based learning, problem solving skill, concept comprehension, ecosystem.

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Universitas Pendidikan Indonesia  
International Program on Science Education

## **ABSTRAK**

Tujuan dari penelitian ini untuk menguji pengaruh pembelajaran berbasis masalah terhadap keterampilan memecahkan masalah siswa dan pemahaman konsep dalam pembelajaran ekosistem di salah satu sekolah swasta di Bandung Barat. Data diperoleh dengan tes pemahaman konsep, tes pemecahan masalah, lembar observasi dan skala bertingkat. Lembar observasi diadaptasi dari Gok. Lembar observasi terdiri dari indikator keterampilan pemecahan masalah; mengidentifikasi prinsip dasar, pemecahan dan mengevaluasi. Hasil analisis data menunjukkan bahwa ada perbaikan dalam pemahaman konsep di kelas eksperimen dengan normalisasi gain 0,5 yang dikategorikan ke dalam perbaikan menengah. Di sisi lain di kelas kontrol diperoleh -1.1. Untuk keterampilan pemecahan masalah di kelas eksperimen diperoleh 0.31 yang dikategorikan ke dalam perbaikan menengah, sementara di kelas kontrol diperoleh 0.14 yang dikategorikan ke dalam perbaikan rendah. Dari lembar observasi dapat digambarkan bahwa profil keterampilan pemecahan masalah di kelas eksperimen lebih tinggi dari kelas kontrol. Sebagian besar siswa memberikan sikap positif dalam belajar melalui pembelajaran berbasis masalah.

**Keywords** : problem-based learning, keterampilan memecahkan masalah, pemahaman konsep, ekosistem.